

Contents Volume 160, 1999

Vol. 160, Nos. 1–2

Research Papers

- The Blue Hills Intrusive Complex in Southern Namibia—relationships between carbonatites and monticellite picrites
S. Kurszlaukis, L. Franz and G.P. Brey 1
- Trace metals and organic geochemistry of the Machiques Member (Aptian–Albian) and La Luna Formation (Cenomanian–Campanian), Venezuela
M. Alberdi-Genolet and R. Tocco 19
- Initial and long-term dissolution rates of aluminosilicate glasses enriched with Ti, Zr and Nd
G. Leturcq, G. Berger, T. Advocat and E. Vernaz 39
- Major and trace elements associated with colloids in organic-rich river waters: ultrafiltration of natural and spiked solutions
B. Dupré, J. Viers, J.-L. Dandurand, M. Polve, P. Bénézech, P. Vervier and J.-J. Braun 63
- A helium, argon, and nitrogen record of the upper continental crust (KTB drill holes, Oberpfalz, Germany): implications for crustal degassing
W. Bach, D. Naumann and J. Erzinger 81
- Geochemistry of Precambrian mafic magmatic rocks of the Western Himalaya, India: petrogenetic and tectonic implications
T. Ahmad, P.K. Mukherjee and J.R. Trivedi 103
- Solid speciation and fractionation of rare earth elements in a spodosol profile from northern Sweden as revealed by sequential extraction
M. Land, B. Öhlander, J. Ingri and J. Thunberg 121
- Rare earth elements and Sr and Nd isotopic compositions of dissolved and suspended loads from small river systems in the Vosges mountains (France), the river Rhine and groundwater
A. Tricca, P. Stille, M. Steinmann, B. Kiefel, J. Samuel and J. Eikenberg 139

Isotope Geoscience Section

- On the occurrence and wider implications of anomalously low δD fluids in quartz veins, South Cornwall, England
S.A. Gleeson, J.J. Wilkinson, A.J. Boyce, A.E. Fallick and F.M. Stuart 161

Vol. 160, No. 3

Research Papers

- Pb–Pb dating and Pb isotope geochemistry of Neoproterozoic carbonate rocks from the São Francisco basin, Brazil: implications for the mobility of Pb isotopes during tectonism and metamorphism
M. Babinski, W.R. Van Schmus and F. Chernoff Jr. 175
- Age significance of U–Th–Pb zircon data from early Archaean rocks of west Greenland—a reassessment based on combined ion-microprobe and imaging studies
M.J. Whitehouse, B.S. Kamber and S. Moorbath 201
- Distribution of uranium- and thorium series radionuclides in mineral phases of a weathered lateritic transect of a uranium ore body
H.R. von Gunten, E. Roessler, R.T. Lowson, P.D. Reid and S.A. Short 225
- Quantitative trace element analyses of silicate reference materials and a stainless steel using the proton microprobe
M. Kurosawa, J.L. Campbell, W.J. Teesdale, H. Ohya, Y. Deguchi and S. Murao 241

Vol. 160, No. 4**Special Issue: Interactions between slab and sub-arc mantle: Dehydration, melting and element transport in subduction zones.**

<i>Editorial</i>	251
<i>Research Papers</i>	
Lithium isotopic composition of Central American Volcanic Arc lavas: implications for modification of subarc mantle by slab-derived fluids L.H. Chan, W.P. Leeman and C.-F. You	255
Boron isotopic composition of subduction-zone metamorphic rocks S.M. Peacock and R.L. Hervig	281
Constraints from high-pressure veins in eclogites on the composition of hydrous fluids in subduction zones H. Becker, K.P. Jochum and R.W. Carlson	291
Slab dehydration and basalt petrogenesis in subduction systems involving very young oceanic lithosphere D.L. Harry and N.L. Green	309
Reaction between slab-derived melts and peridotite in the mantle wedge: experimental constraints at 3.8 GPa R.P. Rapp, N. Shimizu, M.D. Norman and G.S. Applegate	335
The solubility of TiO_2 in olivine: implications for the mantle wedge environment L. Dobrzhinetskaya, K.N. Bozhilov and H.W. Green II	357
Radiogenic helium in xenoliths from Simcoe, Washington, USA: implications for metasomatic processes in the mantle wedge above subduction zones A. Dodson and A.D. Brandon	371
Isotopic constraints on time scales and mechanisms of slab material transport in the mantle wedge: evidence from the Simcoe mantle xenoliths, Washington, USA A.D. Brandon, H. Becker, R.W. Carlson and S.B. Shirey	387
The redox state of subduction zones: insights from arc-peridotites I.J. Parkinson and R.J. Arculus	409
Petrology of a mantle-derived rhyolite, Hokkaido, Japan T. Takagi, Y. Orihashi, K. Naito and Y. Watanabe	425
<i>Contents Volume 160, 1999</i>	447